COMPITO 12-11-26

Es # 1

(1) $III\,1 \times IV\,4 \rightarrow Aa$

$AA \quad Aa \rightarrow Aa$

$\frac{1}{2} \times \frac{2}{3} \times \frac{1}{2} = \frac{1}{6}$

$Aa \times AA \rightarrow Aa$

$\frac{1}{2} \times \frac{1}{3} \times \frac{1}{2} = \frac{1}{12}$

$Aa \times Aa \rightarrow Aa$

$\frac{1}{2} \times \frac{2}{3} \times \frac{1}{2} = \frac{1}{6}$

$P_{TOT} = \frac{1}{6} + \frac{1}{12} + \frac{1}{6} = \frac{5}{12}$ PROB FIGLIO PORTATORE

(2) $P_{MACETO} = \frac{1}{2} \cdot 1 \times \frac{1}{4} = \frac{1}{8}$

$P_{SANO} = 1 - \frac{1}{8} = \frac{7}{8}$

$P = \frac{5!}{3!\,2!} \times \left(\frac{7}{8}\right)^3 \cdot \left(\frac{1}{8}\right)^2$

Es #2

$$\frac{+\ c\ b}{a\ +\ +} \times \frac{a\ c\ b}{a\ c\ b}$$

c in mezzo

$$d_{a\text{-}c} = \frac{70+54+1+0}{860} = \frac{125}{860} = 0.145 = 14.5\,um$$

$$d_{c\text{-}b} = \frac{19+20+1+0}{860} = \frac{40}{860} = 0.046 = 4.6\,um$$

$$cc = \frac{1/860}{0.145 \times 0.046} = \frac{0.00116}{0.00667} = 0.17$$

$$I = 1 - 0.17 = 0.83$$

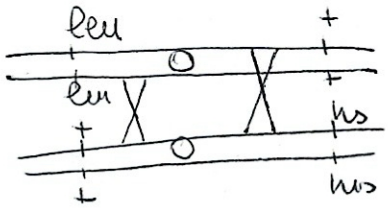
Es #3

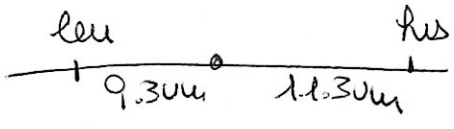
leu + (x) + his

$$d_{leu\text{-}CEN} = \frac{1}{2}\left(\frac{4+66+8}{420}\right) = \frac{1}{2} \times \frac{78}{420} = 0.093 = 9.3\,um$$

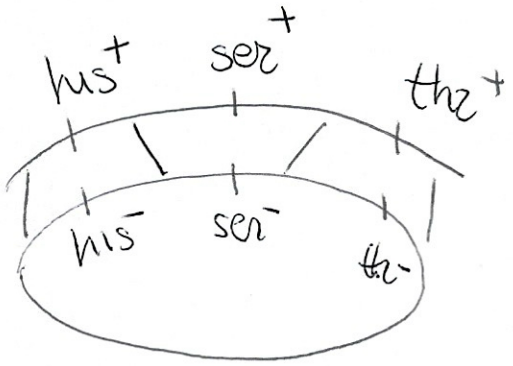
$$d_{his\text{-}CEN} = \frac{1}{2}\left(\frac{83+4+8}{420}\right) = \frac{1}{2} \times \frac{95}{420} = 0.113 = 11.3\,um$$

$$d_{leu\text{-}his} = \frac{2 + 1/2(83+66+8)}{420} = \frac{2+78.5}{420} = 0.191 = 19.1\,um$$





Es # 4



ser al centro
classe $his^+ thr^+ ser^-$ = 18
richiede 4 scambi

his - ser - thr

$$d_{his-ser} = \frac{80+18}{963} = \frac{98}{963} = 0.10 = 10\,UR$$

$$d_{ser-thr} = \frac{18+180}{963} = \frac{198}{963} = 0.20 = 20\,UR$$

Es # 5

$$\left.\begin{matrix} X^A X^A \\ X^A X^a \end{matrix}\right] \text{malato} = 0.25$$

$X^a X^a$ sano = 0.75

$$X^a = \sqrt{0.75} = 0.866$$

$X^a Y = 86.6\%$